operational flexibility to provide fixed, mobile, or hybrid services.[228] Because of the issues pending is this proceeding concerning automatic interconnection and service to units on land, however, we did not address operational flexibility for maritime CMRS services at that time. In light of the actions taken and proposed in this proceeding, we seek comment on the following:

(a) Should public coast stations be afforded additional flexibility to provide fixed or hybrid CMRS services? What specific measures, if any, are appropriate?

(b) What additional operational measures should be considered to permit licensees to respond to market demands while preserving the distress and safety features of this maritime service?

(c) Should the Commission provide a greater level of operational flexibility for stations located far from navigable waterways? If so, what specific options should be considered?

9. Regulatory Status

99. We propose to allow regional licensees, partitionees, or disaggregatees to use their spectrum to provide a variety of commercial or private mobile communications. While this approach increases operational flexibility, thereby allowing service providers to better respond to market demand, it also makes it difficult to determine the regulatory status of each licensee.

100. We propose to establish a presumption that regional licensees are telecommunications carriers. Otherwise, we propose to rely on applicants to specifically identify the type of service or services they intend to provide and that they include sufficient detail to enable the Commission to determine whether the service will be offered as a CMRS[229] or private land mobile radio service. Therefore, we propose that any interested party would be able to challenge the regulatory status originally granted to a regional licensee. This approach should allow us to carry out our regulatory responsibilities without imposing a hardship upon licensees. We seek comment on our general approach in determining regulatory status of licensees and the following questions.

(a) We seek comment on the most efficient manner in which to administer the requirements of the Communications Act and our rules and, at the same time, grant regional licensees as much operational flexibility as possible.[230]

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[228] In this context, "broadband CMRS licensees" included PCS, cellular, and SMR, while "narrowband CMRS licensees" included paging, narrowband PCS, commercial 220 MHz service, and for-profit interconnected Business Radio Service. *See CMRS Flexibility First Report and Order*, 11 FCC Rcd at 8977.

[229] *See* 47 U.S.C. § 332(d)(1).

[230] We note here that we are addressing similar concerns in regard to regulatory status and increasing flexibility in the CMRS. *See CMRS Flexibility First Report and Order*, 11 FCC Rcd at 8965.

(b) We also request that commenters address whether it is necessary for the Commission to require licensees to notify the Commission if they change the type of service offered using some or all of their licensed spectrum even though the new use would be permissible under our rules. If so, what requirements should be met in effecting notification?

(c) Section 10 of the Communications Act[231] instructs the Commission to forbear from regulating telecommunications carriers or services, in some or all of their applicable geographic markets, in cases where regulations are unnecessary and do not serve the public interest. To what extent, if any, should such forbearance apply to public coast station licensees? Commenters supporting full or partial forbearance should address what circumstances already exist, or may arise, that ensure just and reasonable telecommunications services, deter discrimination in the provision of services, and protect consumers.

10. Safety watch

101. VHF public coast stations are part of an international safety system intended to provide assistance to vessels in distress. Vessel operators world-wide use marine VHF channel 16 (156.8 MHz) in the same manner that land-line telephone subscribers dial "911" in an emergency. Rather than being relayed to a local dispatch center, however, vessel operators rely on public coast stations and other nearby vessels to respond and relay distress messages to local search and rescue authorities. In the United States, the Coast Guard is responsible for search and rescue operations at sea and on inland waterways and maintains an extensive system of coast stations to monitor channel 16 for distress messages.

102. In addition to providing common carrier services, VHF public coast stations are required to maintain a continuous watch on channel 16.[232] Presently, a public coast station may be exempted from this watch in cases where federal, state, or local government stations maintain a continuous watch on channel 16 over 95 percent of the public coast station's service area.[233] In order to obtain an exemption, however, the licensee must submit charts for review by the Commission showing the coverage of the government station(s) and the public coast station's service area. Upon receiving an exemption, the licensee must notify the appropriate Coast Guard district office of the discontinuation of its safety watch. For incumbent and regional licensees, we request comment on eliminating the need for the Commission to process these exemption requests individually. In consideration of the Coast Guard's vast coverage area and the administrative burdens associated with processing such exemption requests, we propose to relieve public coast stations of the channel 16 watch requirement, by rule, in cases where federal, state, or local governments already maintain a continuous watch over 95 percent of a public coast station's service area. Under this proposal, licensees would not be required to submit individual

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[231] *See* 47 U.S.C. § 160.

[232] 47 C.F.R. § 80.303.

[233] 47 C.F.R. § 80.303(b).

requests to the Commission. Instead, each licensee would be responsible for: (1) determining whether the "95 percent" criteria is met, (2) notifying the appropriate Coast Guard district office 30 days prior to discontinuing the watch, and (3) resuming the watch at the request of the Coast Guard or the Commission. We seek comment on whether additional procedures are necessary in order to ensure safety of life at sea.

B. High seas public coast station spectrum

1. Current licensing process

103. Unlike short-range VHF public coast stations, high seas public coast stations are capable of serving vessels thousands of miles away. These coast stations provide a variety of voice and data telecommunications services including radiotelephone (voice), radiotelegraph (manual Morse code), narrow-band direct-printing (NB-DP), and facsimile. High seas public coast station frequencies are allocated internationally and distributed among eleven frequency bands as shown in Table 1 below. Because radio signals behave differently at LF, MF, and HF frequencies than VHF frequencies, some of these bands are unusable at certain times of day or night due to varying atmospheric and solar conditions. Therefore, it is essential for high seas public coast stations to obtain frequencies in several bands in order to provide communications services under constantly changing conditions.

TABLE 1 - HIGH SEAS FREQUENCY ALLOTMENT

(Frequency bands in MHz, "✓" indicates that frequencies are allotted in the band)

	LF	MF		HF							
	.100/ .160	.405/ .525	2	4	6	8	12	16	18/ 19	22	25/ 26
Radiotelephone (MF-8 regions) (HF-9 regions)			✓	✓	✓	✓	✓	✓	✓	✓	✓
Radiotelegraph (11 regions)	✓	✓	✓	✓	✓	✓	✓	✓		✓	
NB-DP				✓	✓	✓	✓	✓	✓	✓	✓
Facsimile				✓	✓	✓	✓	✓	✓	✓	✓

104. High seas public coast station frequencies are assigned for exclusive use in accordance with the international Radio Regulations, based on the type of radio communication service the station intends to provide. There are distinct frequencies set aside internationally for radiotelephone, radiotelegraph, NB-DP, and facsimile communications. Additionally, assignments are made using slightly different regional boundaries, depending on the type of service. For example, radiotelephone frequencies are assigned based on four Standard Defined Areas[234] encompassing the continental U.S. and three other geographic regions including Alaska, the Caribbean, and the Pacific islands. Radiotelegraph frequencies, however, are assigned based on eleven geographic regions.[235] In these two cases, a station is assigned a frequency based on the region in which its transmitter is to be located (radiotelephone), or based on the ocean region it intends to serve (radiotelegraph).[236] In contrast, NB-DP and facsimile frequencies are assigned for nation-wide use by a single station. In certain instances, a licensee may apply for an offset carrier frequency in order to avoid interference from a co-channel or adjacent channel station in another region or another country. In this case, authorization is given upon coordination and approval by the Interdepartment Radio Advisory Committee (IRAC).[237]

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[234] The four Standard Defined Areas are USA CL, USA E, USA W, and USA SO. A description of each area is contained in Appendix D. These areas are identified in the Radio Regulations, Appendix 25 Planning Systems and indicated in the Preface to the International Frequency List (IFL). *See* IFRB Circular-letter No. 843, dated October 31, 1990.

[235] 47 C.F.R. § 80.357(b).

[236] Assignments may differ from the regional assignment plan only upon approval of the ITU.

[237] The IRAC is responsible for frequency coordination efforts on behalf of the Federal Government and is composed of representatives from various government agencies. In this connection, the IRAC advises the National Telecommunication and Information Administration (NTIA) concerning spectrum management issues and coordinates spectrum issues among government users and with the Commission.

105. Presently, a high seas public coast station may initially be assigned one channel in each of the applicable frequency bands. In the cases of MF and HF radiotelegraph, HF radiotelephone, and HF NB-DP, a station may only be assigned additional frequencies in each band if certain loading criteria are met.[238] A station does not have to meet such loading criteria to request additional MF radiotelephone, MF and HF radiotelephone (Mississippi River use), or MF and HF facsimile channels.[239]

2. Elimination of channel loading requirements

106. We propose to eliminate channel loading requirements for high seas public coast stations. Consistent with our decision to eliminate the channel loading criteria for VHF public coast stations, we are proposing that the channel loading requirements specified in 47 C.F.R. §§ 80.371(b), 80.357(b)(2)(ii)(B), 80.361(a)(2), and 80.374(a)(2) be amended to remove the showing required for a licensee to obtain additional MF and HF radiotelegraph, HF radiotelephone, and HF NBDP channels. Like the VHF band loading criteria, these requirements were intended to prevent channel warehousing and ensure efficient use of the maritime spectrum. We tentatively conclude, however, that continuing to impose loading requirements on high seas public coast stations could unfairly impair the ability of providers to compete. We believe that the efficient use of high seas public coast station spectrum is more appropriately monitored through construction than channel loading requirements.

107. Section 309(j)(4)(B) of the Communications Act requires the Commission to employ performance requirements such as deadlines or coverage rules to prevent the warehousing of spectrum.[240] In Section IV(A)(5) *supra*, we proposed various construction requirements for VHF public coast station regional licensees. We tentatively conclude, however, that these types of proposed construction requirements are inappropriate for high seas public coast stations. Unlike short-range VHF stations, a high seas station can provide service to vessels thousands of miles from the transmitter site. Thus, by constructing a multi-frequency station at a single site, a high seas licensee could serve a substantial population or geographic area, for example, every vessel in the Atlantic Ocean. Thus, employing long-term construction requirements based on population or geographic service areas, in this case, is inappropriate.

108. Thus, we tentatively conclude that the existing construction requirement for high seas stations should be retained, but extended from eight months to twelve months, consistent with our treatment of other CMRS licensees. High seas coast stations are already required to place new frequencies in operation within eight months of authorization and to exchange radio

[238] 47 C.F.R. §§ 80.371(b), 80.357(b)(2)(ii)(B), 80.361(a)(2), and 80.374(a)(2).

[239] 47 C.F.R. §§ 80.371(a) and (d), and 80.363(a)(2).

[240] 47 U.S.C. § 309(j)(4)(B).

communications with any ship or aircraft station at sea without discrimination.[241] Further, under the rules proposed herein, competitive bidding procedures would be used to resolve mutually exclusive applications. In this connection, it is unlikely that an entity would bid for and place a frequency in operation for the purposes of stockpiling spectrum. Therefore, we tentatively conclude that the buildout requirement and service obligations which already apply to high seas public coast stations satisfy our obligations under Section 309(j)(4)(B) of the Communications Act. Under this approach, licensees would be required to place each newly assigned channel in operation within twelve months of the initial license grant. In this context, the phrase "in operation" shall mean that the public coast station is capable of transmitting and receiving public correspondence on the newly assigned channel and must do so without discrimination.

109. We also tentatively conclude that the present method of assigning high seas frequencies minimizes administrative burdens on the public and the Commission while promoting the prompt resolution of mutually exclusive applications. The high seas public coast frequencies are already assigned on a geographic or nationwide basis. We propose that where two or more entities apply for authorization on the same channel, and in the same service area where applicable, within thirty days of the date that the first application is placed on public notice, the applications be considered mutually exclusive and the channel assigned by competitive bidding.

110. We seek comment on the proposed elimination of channel loading requirements that apply to high seas public coast stations, extending the current construction requirement from eight to twelve months, and resolving mutually exclusive applications by competitive bidding. We also request comment on the following questions.

(a) Are the twelve-month buildout requirement and service obligations described above sufficient to deter spectrum warehousing? What other measures, if any, should be taken in this regard?

(b) Rather than eliminating the channel loading requirements for high seas public coast stations, should the Commission consider relaxing the loading criteria or increasing the number of frequencies that may be obtained per application?

C. Automated Maritime Telecommunications System (AMTS) Spectrum

111. An AMTS is a specialized system of public coast stations providing integrated and interconnected marine voice and data communications, somewhat like a cellular phone system, for tugs, barges, and other commercial vessels on waterways. AMTS stations are allocated spectrum separate from the marine VHF (156-162 MHz) band and high seas band public coast stations discussed above. Presently, there are forty frequency pairs in the 217-220 MHz band

[241] 47 C.F.R. §§ 80.49, 80.105, and 80.106.

available for assignment to AMTS stations.[242] The assignable frequencies are divided into two frequency groups -- Group A and Group B -- each with twenty channel pairs.[243] AMTS stations are also licensed by rule to use the 216.750-217 MHz band for low power point-to-point network control communications under the Low Power Radio Service in Part 95 of our Rules.[244]

112. AMTS licensees must provide continuity of service to either: a substantial navigational area along the Pacific, Gulf of Mexico, or Atlantic coastline; sixty-percent of one or more major inland waterways; or an entire inland waterway less than 240 kilometers (150 miles) long.[245] Presently there are three AMTS licensees: WATERCOM serving the Mississippi River system and Gulf of Mexico; and Orion and PSI serving the Atlantic, Pacific and Hawaiian coastlines. PSI and Orion also have applications pending before the Commission to provide service to a portion of the Great Lakes.

113. *Siting Flexibility in the AMTS.* Because AMTS coast stations operate adjacent to television broadcast spectrum, the Commission must consider the potential for harmful interference to television reception prior to authorizing new AMTS sites. Presently, AMTS applicants proposing to locate a new transmitter within 169 kilometers (105 miles) of a channel 13 television station or within 129 kilometers (80 miles) of a channel 10 television station or with an antenna height greater than 61 meters (200 feet) above ground must submit to the Commission an engineering study showing the means of avoiding harmful interference to television reception.[246] In addition, such applicants are required to notify each channel 13 or channel 10 television station which may be affected in order to provide broadcasters an opportunity to comment on the proposed construction.[247] Nonetheless, the Commission has placed the burden on AMTS licensees to rectify harmful interference to television reception, or cease their operations.[248]

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[242] The AMTS originally was allocated eighty frequency pairs in the 216-220 MHz band. The band is divided into four frequency groups: the paired A and B Groups in the 217-218 MHz and 219-220 MHz bands and the paired C and D Groups in the 216-217 MHz and 218-219 MHz bands. The 216-217 MHz band, however, was found to be unusable by high power AMTS coast stations close to television broadcast stations due to the potential for harmful interference to television reception, and in 1996 we designated this band for low power communications. *See* par. 120 *infra*. Further, the 218-219 MHz band was reallocated to the Interactive Video and Data Service (IVDS) in 1992. Thus, the C and D Groups are no longer assignable to AMTS coast stations.

[243] 47 C.F.R. § 80.385.

[244] 47 C.F.R. § 95.629.

[245] 47 C.F.R. § 80.475(a).

[246] 47 C.F.R. § 80.475(a)(1).

[247] 47 C.F.R. § 80.475(a)(2).

[248] 47 C.F.R. § 80.215(h).

114. As AMTS telecommunications services have become more popular, the need to rapidly construct new sites has increased. AMTS licensees such as Orion, however, feel that the present authorization process for new AMTS sites is burdensome and constitutes an unnecessary barrier to the provision of telecommunications services to the maritime community. For example, on March 5, 1996, Orion filed a Request for Advisory Opinion (Request) with the Commission concerning service to stations at remote fixed locations.[249] In its Request, Orion points out that Section 80.453(b) of the Commission's Rules, 47 C.F.R. § 80.453(b) provides that "public coast stations are authorized to communicate with a designated station at a remote fixed location where other communication facilities are not available."[250] Orion notes that it is aware of the existence of a number of remote fixed locations within the areas served by its AMTS stations at which other communication facilities are not available (*e.g.*, residences on islands, unattended petroleum platforms, and residences in isolated mountainous terrain).[251] Orion explains that providing wireline service to such locations would not be profitable and that such sites are sufficiently distant from other radio carriers that no other types of service is generally available.[252] In its Request, Orion asks the Commission to permit AMTS licensees to serve stations at remote fixed locations without requiring modification of their licenses.[253] Orion argues that requiring AMTS licensees to modify their licenses for each new station would constitute an unequal regulatory burden compared to those placed on competing CMRS providers.[254]

115. As described in Orion's Request, there may be instances where AMTS licensees could benefit from a more flexible authorization procedure, so long as such a policy does not result in harmful interference to television reception. Therefore, we tentatively conclude that AMTS licensees should be permitted to construct additional coast stations within their respective service areas, including fill-in sites and stations at remote fixed locations, with a minimum of regulatory burdens imposed by the Commission. We seek comment from the maritime and broadcasting communities concerning ways to streamline regulatory procedures for AMTS applicants while continuing to protect television reception.

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[249] *See* Request for Advisory Opinion from Dennis C. Brown representing Orion to Roger Noel, Private Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission (March 5, 1996).

[250] Request at 1.

[251] Request at 2.

[252] *Id.*

[253] Request at 3.

[254] *Id.*

(a) What percentage of existing AMTS transmitters have required broadcaster notification as described above? Has the placement of these transmitters resulted in harmful interference to television reception? If so, what steps have AMTS licensees taken to remedy such situations?

(b) As noted above, only those transmitters proposed to be located near a broadcast station or higher than 61 meters require an engineering study and broadcaster notification. These criteria were developed more than a decade ago based on technical characteristics of analog NTSC transmissions and "average" television receivers. Should the separation criteria be different for digital television stations?[255] Have analog television receivers improved sufficiently since that time such that the Commission should reevaluate these criteria? Will digital television receivers have different characteristics that we should account for? If so, we invite interested parties to submit technical data supporting their conclusions.

(c) What would be the advantages and/or disadvantages of developing technical limitations (*e.g.*, transmitter height, effective radiated power, and separation from broadcasters) to provide greater flexibility to AMTS licensees by allowing them to construct fill-in stations or stations at remote locations without notifying the Commission and/or nearby broadcasters prior to construction? What technical limitations would be appropriate, if any?

116. *Construction Flexibility in the AMTS.* AMTS public coast stations are licensed on a site-by-site basis and new stations must be placed in operation within eight months from the date of grant.[256] In order to be eligible for an AMTS authorization, however, an applicant must show how a system of individual AMTS stations will provide continuous coverage to a waterway. This approach results in the Commission granting authorizations for each AMTS station within a system on the same date, requiring the licensee to construct its entire system in eight months. To remedy this situation, AMTS licensees have often requested additional time, up to two years, in which to construct their systems.

117. Based on our experience authorizing AMTS systems, we tentatively conclude that the existing eight-month construction requirement does not generally provide sufficient time in which to construct a system of coast stations. Therefore, we propose to amend our Rules to require new AMTS systems (*i.e.* each station within the proposed system) to be placed in operation within two years of date of grant. We also propose that subsequently licensed stations that extend the geographic area served by an AMTS system be placed in operation within one

[255] *See* Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, *Sixth Report and Order*, FCC 97-115 (released Apr. 21, 1997); Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, *Fifth Report and Order*, FCC 97-116 (released Apr. 21, 1997); Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, *Fourh Report and Order*, FCC 96-493 (released Dec. 27, 1996).

[256] 47 C.F.R. § 80.49.

year of date of grant, consistent with our treatment of other CMRS licensees. Under this approach, we would not impose construction requirements on fill-in sites, as they would not extend a system's service area or limit the ability of other applicants to use AMTS spectrum. We seek comment on these proposals and the following questions.

(a) The service area for each VHF public coast station (156-162 MHz) is clearly defined in Part 80 Subpart P of our Rules and may be used to determine whether or not a new station would extend a coast station's service area.[257] The Rules do not, however, specifically define a service area for AMTS public coast stations. What criteria should the Commission use to differentiate between fill-in stations and stations that extend an AMTS system? Similarly, what criteria should the Commission use to differentiate between applications proposing to extend an AMTS system and applications proposing a new AMTS system nearby? Commenters addressing this issue should provide technical information to support their conclusions.

(b) The one-year construction requirement proposed above may be appropriate in cases where a licensee is requesting a single station authorization to extend its AMTS system. What construction requirement would be appropriate for a licensee proposing to significantly extend its system by constructing multiple stations? Should the Commission consider such an application to be a new AMTS system?

118. *Technical Flexibility in the AMTS.* The Commission's rules set forth certain technical requirements governing the authorized power, emission types, and bandwidth of AMTS transmissions. In some cases, however, these technical requirements limit the kinds of technologies used by licensees and the types of services that may be offered to the maritime community. For example, AMTS coast stations are required to use FM radio equipment for all transmissions. This precludes the use of narrowband technologies such as amplitude compandored single sideband (ACSB), which is used in the immediately adjacent 220-222 MHz band.[258] On February 15, 1996, Orion filed a Request for Rule Waiver (ACSB Waiver Request) with the Commission to permit the use of ACSB emissions at eleven transmitter sites serving the Pacific Coast.[259] In its ACSB Waiver Request, Orion points out that alternative modulation technologies can be cheaper than 220 MHz band FM systems and provide increased security over FM systems.[260] Further, Orion notes that the greater communications capacity attained by employing more efficient modulation is essential for AMTS systems to compete with other

[257] 47 C.F.R. Part 80 Subpart P - Standards for Computing Public Coast Station VHF Coverage.

[258] *See* Amendment of Part 90 of the Commission's Rules To Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services, PR Docket No. 89-552, *Report and Order*, 6 FCC Rcd 2356 (1991) (*220 MHz Report and Order*).

[259] *See* ACSB Waiver Request from Dennis C. Brown representing Orion to Federal Communications Commission, Gettysburg Office (Feb. 21, 1996).

[260] *See* ACSB Waiver Request at 3-4.

CMRS providers such as cellular radio.[261]

119. The Wireless Telecommunications Bureau granted Orion's request for waiver contingent on the following conditions: (1) transmitting equipment must be type accepted by the Commission; (2) any channelization scheme may be used within the licensee's authorized AMTS channel group; (3) emissions must be attenuated at the band edges of each station's assigned channel group in accordance with 47 C.F.R. § 80.211 and shall not, under any circumstance, exceed the adjacent channel emission limitations of each station's original authorization; and (4) transmissions must otherwise meet the technical criteria set forth in 47 C.F.R. Part 80 Subpart E.[262] We tentatively conclude that permitting AMTS licensees to use alternative modulations and channel schemes in this manner will benefit the maritime public by increasing the number and types of telecommunications services available while promoting more efficient use of the maritime radio spectrum. Therefore, we propose to eliminate the modulation and channelization requirements for AMTS public coast stations, so long as transmissions do not exceed the adjacent channel emission limitations of each station's authorization. We also propose to amend the rules governing the output power measurement of AMTS coast stations to make them consistent with those governing VHF band (156-162 MHz) public coast stations.[263] This would permit measuring transmission power at the antenna input, eliminating the variable effect of transmission line losses and resulting in greater permissible power for AMTS coast stations. We seek comment on what effect, if any, these proposed changes would have on channel 10 and channel 13 television broadcast reception.

120. The proposals to increase technical flexibility discussed above pertain to high power AMTS operations licensed under Part 80 of the Rules. AMTS public coast stations, however, are also licensed by rule under the Low Power Radio Service (LPRS) in Part 95 of the Rules to transmit point-to-point network control communications.[264] Under the LPRS, AMTS licensees may use up to 100 mW transmitter effective radiated power in the 216.750-217 MHz band in order to better manage their systems of coast stations.[265] On August 19, 1996, Orion filed a Petition for Reconsideration (Petition) of the *Report and Order* in WT Docket No. 95-

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[261] *See* ACSB Waiver Request at 3.

[262] *See* letter from Walter G. Boswell, Chief, Licensing Division, Wireless Telecommunications Bureau, Federal Communications Commission to Mr. Fred Daniel, Orion (Nov. 21, 1996).

[263] VHF public coast station power is specified as 50 watts measured at the input terminals of the station antenna, whereas AMTS station power is specified as 50 watts measured at the output of the transmitter. Thus, AMTS station power may be significantly reduced from the authorized 50 watts by transmission line losses.

[264] 47 C.F.R. § 95.1001.

[265] 47 C.F.R. §§ 95.629 and 95.1013.

56,[266] asking the Commission to increase the power for AMTS stations under the LPRS to 1 watt.[267] Orion subsequently withdrew its Petition and requested that this matter instead be considered in this proceeding.[268]

121. In the *LPRS Report and Order*, the Commission decided to restrict power to 100 mW effective radiated power in order to minimize the potential for harmful interference to television channel 13 (210-216 MHz) reception as well as the United States Navy's SPASUR radar system (216.88-217.08 MHz).[269] Further, the Commission chose the minimum practical power level supported in the comments to the proceeding in order to promote channel reuse and reduce the potential for harmful interference among LPRS units. In its Petition, however, Orion argues that 1 watt is "the absolute lowest practical power output to support a feasible network control solution for AMTS systems."[270] Orion supports this conclusion by providing a sample link budget analysis showing that the current power limitation effectively prohibits LPRS communications among AMTS coast stations which are typically spaced 30 to 50 miles apart.[271]

122. Based on the information provided in Orion's Petition, we believe it would be appropriate to reexamine the LPRS power level for AMTS licensees. AMTS licensees are significantly different from the other entities[272] licensed by rule under the LPRS because they are already licensed under Part 80 of the Rules and their locations are fixed and known. This fact may allow for additional flexibility in setting power limits for AMTS licensees under the LPRS. Any power increase under the LPRS, however, would be contingent on an examination of the potential negative affects to television reception, U.S. government systems, and other LPRS units. Rather than proposing a new power limit based on the analysis provided by Orion, we seek

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[266] *See* Amendment of the Commission's Rules Concerning Low Power Radio and Automated Maritime Telecommunications System Operations in the 216-217 MHz Band, WT Docket No. 95-56, *Report and Order*, 11 FCC Rcd 18517 (1996) ("*LPRS Report and Order*").

[267] Petition at 1. The *LPRS Report and Order* created and set forth the technical and operational specifications for stations in the LPRS.

[268] *See* letter from Mr. Fred Daniel, Orion Telecom, to the Secretary, Federal Communications Commission (December 10, 1996). Although the information contained in the Petition was filed well after the comment dates listed in the *Further Notice*, we believe the maritime community could benefit from such a discussion of increased flexibility for AMTS stations under the LPRS in the context of this proceeding.

[269] *LPRS Report and Order* at 11 FCC Rcd 18517.

[270] Petition at 2.

[271] Petition at 2.

[272] The LPRS consists of the following types of devices: (1) auditory assistance devices for persons with disabilities, (2) health care assistance devices, (3) law enforcement tracking systems under agreement with a law enforcement agency, and (4) AMTS point-to-point network control transmitters. Except for AMTS licensees, entities licensed by rule under the LPRS are not required to have an FCC license and are generally private individuals operating intermittently for short periods, sometimes on a mobile basis.

comment on the advantages and/or disadvantages of increasing AMTS transmitter power under the LPRS. We ask that commenters consider the factors mentioned above and provide technical data supporting their conclusions.

D. Competitive bidding procedures for the public coast service

123. In the *CMRS Second Report and Order*, the Commission classified the public coast service, including the VHF public coast stations, high seas public coast stations, and AMTS public coast stations discussed above, as a Commercial Mobile Radio Service (CMRS).[273] Subsequently, in the *Competitive Bidding Second Report and Order*, the Commission determined that mutually exclusive applications for public coast station licenses may be resolved through competitive bidding.[274] The Commission adopted general competitive bidding rules for all auctionable services in the *Competitive Bidding Second Report and Order*, stating that it would "issue further reports and orders . . . to adopt auction rules for each auctionable service or class of service."[275]

124. We recently adopted an *Order and Notice of Proposed Rule Making* to streamline auction procedures as well as propose competitive bidding rules that will generally apply to all auctionable services, including the public coast service.[276] In that proceeding, we amended the general competitive bidding rules governing auction methodology and procedures to reflect changes made to the auction process through service-specific rules. In addition, we proposed a range of special provisions for designated entities that we can choose from in establishing rules on a service-specific basis. Based on the record established in that proceeding, we will prescribe competitive bidding rules and designated entity provisions that will govern the public coast service.[277]

125. *Small Business.* At this time, however, we seek comment regarding the establishment of a "small business" definition for the public coast service. In the *Second*

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[273] *See CMRS Second Report and Order*; 9 FCC Rcd at 1411;47 C.F.R. § 20.9(a)(5).

[274] *See* Implementation of Section 309(j) of the Communications Act - Competitive Bidding, *Second Report and Order*, PP Docket No. 93-253, 9 FCC Rcd 2348 (1994) (*Competitive Bidding Second Report and Order*); 47 C.F.R. § 1.2102(a)(2) (citing 47 C.F.R. Part 80, Subpart J).

[275] *Competitive Bidding Second Report and Order* at 9 FCC Rcd 2348, 2360 par. 68 (1994).

[276] Amendment of the Commission's Competitive Bidding Rules, WT Docket No. 97-82, *Order and Notice of Proposed Rule Making*, FCC 97-60 (released Feb. 28, 1997) (*Part 1 NPRM*).

[277] The Commission makes no representations or warranties about the use of this spectrum for particular services. Applicants should be aware that an FCC auction represents an opportunity to become an FCC licensee in this service, subject to certain conditions and regulations. An FCC auction does not constitute an endorsement by the FCC of any particular services, technologies or products, nor does an FCC license constitute a guarantee of business success. Applicants should perform their individual due diligence before proceeding as they would with any new business venture.

Memorandum Opinion and Order in the competitive bidding docket, we indicated that we would establish definitions for "small business" on a service-by-service basis.[278] For example, the Commission adopted a $40 million small business definition for both narrowband and broadband PCS,[279] and the Multipoint Distribution Service (MDS).[280] For the 900 MHz SMR Service and the 800 MHz SMR Service, however, the Commission has adopted a two-tiered approach to the definition of small business: "small" businesses (the applicant, together with attributable investors and affiliates, has average gross revenues for the three preceding years of $15 million or less) and "very small" businesses (the applicant, including attributable investors and affiliates, must have average gross revenues for the three preceding years of $3 million or less).[281] We seek comment on whether we should apply one of the existing "small business" definitions to public coast stations, or whether we should adopt a new definition. Commenters should also discuss the level of capital commitment that is likely to be required to purchase VHF public coast regional licenses, high seas public coast station licenses, and AMTS licenses at auction and create a viable business. Our goal, should we adopt a definition and associated special provision(s) for small businesses, will be to ensure the participation of small businesses in the auction and in the provision of service.

126. We note that small business provisions offered in other services include installment payment plans and bidding credits. We seek comment on what small business provisions should be offered to public coast small business licensees and what terms should be offered. In other services we also adopted different attribution rules for purposes of determining small business status. We tentatively conclude that, for purposes of determining small business status of public coast applicants, we will attribute the gross revenues of all the applicants' affiliates, its controlling principals and their affiliates. We seek comment on this tentative conclusion. In addition, we tentatively conclude that our definition of affiliate in the public coast context should include an exception for Indian tribes, Alaska Region, or Village Corporations.[282]

127. We also seek comment on whether small business provisions are sufficient to promote participation by businesses owned by minorities and women and rural telephone companies. To the extent that commenters propose additional provisions to ensure participation by minority and women-owned businesses, we also invite them to address how such provisions

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[278] Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Memorandum Opinion and Order*, 9 FCC 7245, 7268-69 (1994).

[279] Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 (1995); *Competitive Bidding Fifth R&O*, 9 FCC Rcd at 5581-5584.

[280] *MDS Report and Order*, 10 FCC Rcd at 9671-72.

[281] *SMR Order*, 11 FCC Rcd 2639, 2075-77 (1996).

[282] *Part 1 NPRM* at ¶ 29.

should be crafted to meet the relevant standards of judicial review.[283]

E. Intra-service sharing of the medium and high frequency bands

128. *Proposal.* In the *Further Notice*, we stated that the number of public coast stations operating in the MF band (2-4 MHz) has decreased by 25% since 1989, while private coast stations are experiencing congestion in the MF band. Therefore, we proposed to redistribute MF marine frequencies by permitting MF private coast stations to obtain unassigned public coast station frequency pairs in the 2 MHz band for non-CMRS operations.[284] Under this proposal, MF private coast stations would not have exclusive use of the frequency pairs, but would be required to share the pairs with other private coast stations.

129. *Comments.* The Coast Guard, MMR, Globe Wireless, and RTCM support the use of unassigned 2 MHz band public correspondence frequencies by private coast stations.[285] These commenters agree that there are a sufficient number of unassigned public correspondence frequencies in the 2 MHz band for sharing without limiting future public coast station operations. MMR argues, however, that private coast stations using public correspondence frequencies should be required to maintain a safety watch, consistent with our requirements for MF public coast stations.[286] Further, MariTEL supports the sharing proposal and urges us to encourage public and private coast stations to share channels on a regional basis.[287]

130. *Discussion.* We tentatively conclude that permitting private coast stations to share MF public correspondence frequencies would promote the more efficient use of maritime spectrum and reduce congestion in the MF band for private coast station licensees. Public coast stations are presently allotted twenty-four frequencies in the 2 MHz band while there are only three frequencies in this band available to private coast stations.[288] The number of public coast stations operating in the 2 MHz band, however, has decreased twenty-five percent since 1989, while private coast stations operating in this band have experienced a marked increase in congestion on their shared frequencies.[289] Moreover, an analysis of our licensing database

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[283] *See Adarand Constructors v. Pena*, 115 S.Ct. 2097 (1995), and *United States v. Virginia*, 116 S.Ct. 2264 (1996).

[284] *Further Notice*, 10 FCC Rcd at 5730. Frequencies in the 2 MHz band are listed in 47 C.F.R. § 80.371(a).

[285] Coast Guard Comments at 4; MMR Comments at 17; Globe Wireless Comments at 3; RTCM Comments at 6.

[286] MMR Comments at 17. 47 C.F.R. § 80.301(b) requires public coast stations licensed in the 2 MHz band to monitor their working frequencies or, at the licensees discretion, to maintain a watch on 2182 kHz.

[287] MariTEL Comments at 7-8.

[288] 47 C.F.R. §§ 80.371 and 80.373.

[289] *Inquiry*, 7 FCC Rcd at 7867.

indicates that there are presently five unassigned MF public coast frequencies on the east coast, five on the west coast, five on the gulf coast, and two in Alaska.[290] Further, the Coast Guard and the public coast stations commenting on this issue support the proposed sharing. Thus, it seems reasonable to make this unused spectrum available to private coast stations.

131. In light of our proposal to eliminate the channel loading requirements for high seas coast stations and the fundamental differences between CMRS and private-use frequencies, however, we seek further comment from the maritime community regarding the procedures which would govern such a sharing arrangement. Specifically, MF public correspondence channels are presently assigned to public coast stations for CMRS operations on an exclusive basis in a geographic region. In contrast, MF band private channels are available for shared use among all private coast stations. Further, unlike public coast stations, private coast stations may not act as common carriers and are not required to maintain a safety watch on the international distress frequency. We seek comment on the following questions.

(a) What are the advantages and/or disadvantages of designating one or more of the unused public correspondence channels for shared use by private coast stations? Should we require that a minimum number of private coast stations be licensed on a frequency before permitting licensing on an additional frequency? If so, what should this minimum number be? Should private coast stations using public correspondence frequencies be required to maintain a safety watch consistent with Section 80.301(b) of our rules?

(b) Should we expand this proposal to all of the MF and HF bands below 27.5 MHz? We realize that in many of the frequency bands, such as the 4 MHz band, there are few, if any, available public coast station frequencies. Setting forth procedures for sharing all MF and HF frequencies at this point, however, would expedite sharing in the event that frequencies become available.

[290] Unassigned public coast frequencies are: On the east coast 2450 kHz, 2482 kHz, 2522 kHz, 2538 kHz, and 2590 kHz; On the west coast 2450 kHz, 2482 kHz, 2466 kHz, 2522 kHz, and 2598 kHz; On the gulf coast 2450 kHz, 2482 kHz, 2466 kHz, 2538 kHz, and 2598 kHz; and in Alaska 2309 kHz and 2312 kHz. *See* 47 C.F.R. § 80.371 for a complete list of 2 MHz band public coast station frequencies.

V. PROCEDURAL MATTERS

A. Suspension of Acceptance and Processing of Applications

132. In light of our actions described above, and effective June 17, 1997, we will temporarily suspend acceptance of public coast station applications to use VHF spectrum (156-162 MHz) and PLMR applications proposing to share that spectrum for new licenses, amendments to such new license applications, applications to modify existing licenses, and amendments thereto, except as provided in paragraph 133. This suspension is effective until March 17, 1998, and applies to such applications received on or after June 17, 1997. Any such applications received on or after June 17, 1997, will be returned as unacceptable for filing. It is our intention to adopt final rules for Maritime services as rapidly as practical and before the suspension expires. In our Third Report and Order we will address our schedule for accepting new applications.[291] We take this action to permit the orderly and effective resolution of the issues in this proceeding. Absent this action, applications for new licenses and amendments to existing licenses might limit the effectiveness of the decisions made in this proceeding. This action is consistent with the general approach we have taken in other existing services in which we have proposed to adopt geographic area licensing and auction rules.[292] We therefore find that this temporary measure is in the public interest. This action has no effect on public coast station applications to use high seas and AMTS spectrum (.100-.160 MHz, .405-.525 MHz, 2-27.5 MHz, and 216-220 MHz), which we will continue to accept and process under existing procedures.

133. Nothwithstanding the temporary suspension of public coast station applications to use VHF spectrum (156-162 MHz) and PLMR applications proposing to share that spectrum, we will continue to accept and process such applications involving renewals, transfers, assignments, and modifications that do not propose to: (1) expand a station's service area, or (2) obtain additional public coast VHF band spectrum (156-162 MHz). This exception should permit modifications that can improve the efficiency of incumbent operations without affecting the effective and orderly resolution of the issues in this proceeding.

134. With respect to public coast station applications to use VHF spectrum (156-162 MHz) which were filed prior to June 17, 1997, and which are pending, we will process such applications provided that (1) they are not mutually exclusive with other applications as of the deadline stated above, and (2) the relevant period for filing competing applications has expired as of the deadline stated above. With respect to PLMR applications to use VHF public coast station spectrum which were filed prior to June 17, 1997, and which are pending, we will process such applications provided that they are not mutually exclusive with other applications as of the deadline stated above. We believe that this approach gives the appropriate consideration to those applicants who filed applications prior to our proposed changes and whose applications are not

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[291] We also reserve the right to extend the suspension if we have not adopted final rules by the end of the suspension period.

[292] *See, e.g., Paging Systems Notice* at ¶ 139 & n.270.

subject to competing applications. Applications to use VHF spectrum (156-162 MHz) filed prior to June 17, 1997, not meeting the above criteria will be held in abeyance until the conclusion of this proceeding. We will determine later, in accordance with such new rules as are adopted, whether to process or return any such pending applications.

135. These decisions are procedural in nature and therefore not subject to the notice and comment and effective date requirements of the Administrative Procedure Act.[293] Moreover, there is good cause for proceeding in this manner: to do otherwise would be impractical, unnecessary, and contrary to the public interest because compliance would undercut the purposes of these interim measures.[294]

B. Regulatory Flexibility Act

136. Appendix B contains a Final Regulatory Flexibility Analysis with respect to the *Second Report and Order* and an Initial Regulatory Flexibility Analysis with respect to the *Second Further Notice of Proposed Rule Making.* As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the proposals suggested in this document. Written public comments are requested on the IRFA. We also seek comment on the number of entities affected by the proposed rules that are small businesses, and request that commenters identify whether they themselves are small businesses. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the *Second Further Notice of Proposed Rule Making*, but they must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. The Secretary shall send a copy of this *Second Report and Order* and *Second Further Notice of Proposed Rule Making*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act. Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601 *et. seq.* (1981).

C. Ex Parte Rules -- Non-Restricted Proceeding

137. This is a non-restricted notice and comment rule making proceeding. Ex parte presentations are permitted except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission's rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).

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[293] *See* 5 U.S.C. §§ 553(b)(A), (d); *Kessler v. FCC*, 326 F.2d 673 (D.C. Cir. 1963).

[294] *See* 5 U.S.C. §§ 553(b)(B), (d)(3).

D. Initial Paperwork Reduction Act of 1995 Analysis

138. This *Second Report and Order and Second Further Notice of Proposed Rule Making* does not contain either a proposed or modified information collection.

E. Comment Dates

139. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415 and 1.419, interested parties may file comments on or before August 25, 1997, and reply comments on or before September 9, 1997. To file formally in this proceeding, you must file an original and four copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an original plus nine copies. You should send comments and reply comments to the Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. You may also file informal comments by electronic mail. You should address informal comments to mayday@fcc.gov. You must put the docket number of this proceeding on the subject line ("PR Docket No. 92-257"). You must also include your full name and Postal Service mailing address in the text of the message. Formal and informal comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center of the Federal Communications Commission, Room 239, 1919 M Street, N.W., Washington, D.C. 20554.

F. Ordering Clauses

140. Authority for issuance of this *Second Report and Order and Second Further Notice of Proposed Rule Making* is contained in Sections 4(i), 4(j), 7(a), 302, 303(b), 303(f), 303(g), 303(r), 307(e), 332(a), and 332(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 157(a), 303(b), 303(f), 303(g), 303(r), 307(e), 332(a), and 332(c).

141. Accordingly, IT IS ORDERED that Parts 0, 2, 80, and 87 of the Commission's Rules, 47 C.F.R. Parts 0, 2, 80, and 87, ARE AMENDED as specified in Appendix E.

142. IT IS FURTHER ORDERED that, except for the temporary suspension set forth in paragraph 143, this *Second Report and Order and Second Further Notice of Proposed Rule Making* will be effective 30 days after publication in the Federal Register.

143. IT IS FURTHER ORDERED that, effective June 17, 1997, NO NEW APPLICATIONS TO USE PUBLIC COAST STATION SPECTRUM UNDER PARTS 80 OR 90 WILL BE ACCEPTED FOR FILING in the 156-162 MHz band, except applications that do not propose to: (1) expand a station's service area, or (2) obtain additional public coast spectrum frequencies.

144. IT IS FURTHER ORDERED that pending applications to use public coast station spectrum under Parts 80 or 90 in the 156-162 MHz band WILL BE PROCESSED provided that (1) they are not mutually exclusive with other applications as of June 17, 1997, and (2) the relevant period for filing competing applications has expired as of the date of adoption of this *Second Report and Order and Second Further Notice of Proposed Rule Making*. Pending applications to use public coast station spectrum under Parts 80 or 90 in the 156-162 MHz band not meeting the above criteria WILL BE HELD IN ABEYANCE until the conclusion of this proceeding. We will determine later, in accordance with such new rules as are adopted, whether to process or return any such pending applications.

145. The interim measures described in paragraph 143 will continue until March 17, 1998. This action is authorized under Sections 4(i), 4(j), and 303(r) of the Communication's Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), and 303(r).

G. Contacts for Information

146. For further information, contact Scot Stone, Roger Noel, or Ira Keltz of the Wireless Telecommunications Bureau, Public Safety and Private Wireless Division, Policy and Rules Branch at (202) 418-0680 or via E-Mail to "mayday@fcc.gov".

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

APPENDIX A - LIST OF COMMENTERS

Comments

American Commercial Barge Line Company and Waterway Communications Systems, Inc. (ACBL/WATERCOM)
American Trucking Association (ATA)
American Waterways Operators (AWO)
Association of American Railroads (AAR)
BR Communications (BR)
Globe Wireless
GulfCoast Transit
Malloy Communications (Malloy)
WJG MariTEL Corporation (MariTEL)
Maritime Navigation Safety Association (MNSA)
Mobile Marine Radio, Inc. (MMR)
National Ocean Industries Association (NOIA)
Necode Electronics (Necode)
Fred Daniel d/b/a Orion Telecom (Orion)
OWA, Inc.
Paging Systems, Inc. (PSI)
PinOak Digital Corporation (PinOak)
Ross Engineering (Ross)
Radio Technical Commission for Maritime Services (RTCM)
SEA, Inc. (SEA)
Teamsters Local No. 9
United States Coast Guard (USCG)

Reply Comments

ACBL/WATERCOM
ARA
BR
Globe Wireless
MariTEL
MMR
Ross

APPENDIX B - REGULATORY FLEXIBILITY ANALYSIS

I. Final Regulatory Flexibility Analysis (for *Second Report and Order*)

As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603 (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rule Making* in this proceeding (*Notice*). The Commission sought written public comments on the proposals in the *Notice*, including on the IRFA. The Commission's Final Regulatory Flexibility Analysis (FRFA) for the *Second Report and Order* conforms to the RFA, as amended by the Contract With America Advancement Act of 1996 (CWAAA), Pub. L. No. 104-121, 110 Stat. 847 (1996).[1]

A. Need for and purpose of the action

Our objective is to promote innovative telecommunications services, improve communications capabilities, and reduce regulatory burdens for licensees in the Maritime Service. Specifically, this action will: (1) permit public coast stations to provide automated services, immediately obtain new channels, and serve units on land (VHF stations only); (2) ensure that affordable digital selective calling (DSC) radio equipment is available for recreational vessels; (3) improve high seas communications by permitting automatic link establishment (ALE) transmissions in the 2-30 MHz band; (4) allow stations using narrow-band direct-printing equipment to employ alternative data communications protocols; (5) reduce regulatory burdens for coast station licensees by eliminating the radiotelephone operator requirement, permitting hand-helds to be used under private coast authorizations, unifying the frequency tolerance requirement for 25 watt coast transmitters, and permitting facsimile on marine VHF channel 68 in Alaska; and (6) reduce regulatory burdens for ship station licensees by providing a "blanket" authorization for all radio equipment on board a vessel and permitting vessel owners to store their station licenses away from the harsh marine environment.

In making these broad changes to the Maritime Service rules, we find that the potential benefits to the maritime community exceed any negative effects that may result from the promulgation of rules for this purpose. Thus, we conclude that the public interest is served by amending our rules as described above.

B. Issues Raised in response to the IRFA

No comments were submitted in response to the IRFA. In general comments on the *Further Notice*, however, some small business commenters raised issues that might affect small business entities. In particular, some small business commenters argued that requiring public coast stations to use a standard signalling protocol (*e.g.*, DSC) is unnecessary, would be overly

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[1] Subtitle II of the CWAAA is "The Small Business Regulatory Enforcement Fairness Act of 1996" (SBREFA), codified at 5 U.S.C. § 601 *et seq.*

burdensome to licensees that have already started developing alternative protocols, and would inhibit the development of innovative protocols to better respond to regional market demands. Small business commenters also pointed out that restricting the types or number of land units to be served by VHF public coast stations would inhibit a station's ability to provide needed services (*e.g.*, customers using hand-held radios or dock-side dispatch stations) and prevent a station from maximizing maritime spectrum efficiency. Further, small business commenters asked that the Commission require marine radios to have a minimum DSC capability which is less extensive and cheaper to implement than the internationally mandated DSC standard for large cargo vessels and passenger vessels. Small business commenters also urged the Commission not to allow recreational vessels to communicate on marine VHF band commercial frequencies on a nation wide basis. These commenters noted that such action would increase congestion on safety channels and inhibit tugs and towing vessels from doing business via marine radio near major ports and waterways. The Commission carefully considered each of these comments in reaching the decision set forth in herein.

C. Description, and Number of Small Entities Involved

The rules adopted herein will apply to small businesses that choose to use, manufacture, design, import, or sell MF, HF, or VHF marine radios. Since this rule making proceeding applies to three groups of small entities, we will analyze the effects of these rules on each of these groups.

Estimates for Marine Radio Manufacturers/Importers

The Commission has not developed a definition of the term "small entity" specifically applicable to marine radio manufacturers and importers. Therefore, the applicable definition of small entity is the definition under the Small Business Administration rules applicable to radio and television broadcasting and communications equipment manufacturers. This definition provides that a small entity is any entity employing less than 750 persons. See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 3663. Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Comiision was unable to request information regarding the number of small entities that may choose to manufacture or import marine radio equipment and is unable at this time to make a meaningful estimate of the number of potential manufacturers or importers which are small businesses.

The 1992 Census of Manufacturers, conducted by the Bureau of Census, which is the most comprehensive and recent information available, shows that approximately 925 out of the 948 entities manufacturing radio and television transmitting equipment in 1992 employed less than 750 persons. We are unable to discern from the Census data precisely how many of these manufacturers produce marine radios. Further, any entity may choose to manufacture of produce marine radio equipment. Therefore, for the purposes of our evaluations and conclusions in this Final Regulatory Flexibility Analysis, we estimate that there are at least 925 potential manufacturers and importers of marine radio equipment which are small businesses, as that term is defined by the Small Business Administration.

Estimates for Public Coast Station Licensees

The Commission has not developed a definition of the term "small entity" specifically applicable to public coast station licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration rules applicable to radiotelephone service providers. This definition provides that a small entity is any entity employing less than 1,500 persons. See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812. Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Comiision was unable to request information regarding the number of small entities that may choose to provide public coast services and is unable at this time to make a meaningful estimate of the number of potential public coast service providers which are small businesses.

The size data provided by the Small Business Administration does not enable us to make a meaningful estimate of the number of public coast station licensees which are small businesses. Therefore, we used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of Census, which is the most recent information available. This document shows that only 12 radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees. There are over 50 public coast station licensees. Based on the proposals contained herein, it is unlikely that more than 9 licensees will be authorized in the future. Therefore, for purposes of our evaluations and conclusions in this Final Regulatory Flexibility Analysis, we estimate that there are approximately 50 public coast station licensees which are small businesses, as that term is defined by the Small Business Administration.

Estimates for Private Coast Station Licensees

The Commission has not developed a definition of the term "small entity" specifically applicable to private coast station licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration rules applicable to radiotelephone service providers. This definition provides that a small entity is any entity employing less than 1,500 persons. See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812. Since the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small entities that may choose to provide private coast services and is unable at this time to make a meaningful estimate of the number of potential private coast service providers which are small businesses.

The size data provided by the Small Business Administration does not enable us to make a meaningful estimate of the number of private coast station licensees which are small businesses. Therefore, we used the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of Census, which is the most recent information available. This document shows that only 12 radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees. There are presently over 100 private coast station licensees. There is no limitation, however, as to the number of private coast station licensees that may be

authorized. Therefore, for purposes of our evaluations and conclusions in this Final Regulatory Flexibility Analysis, we estimate that there are over 100 private coast station licensees which are small businesses, as that term is defined by the Small Business Administration.

D. Summary of Projected Reporting, Recordkeeping, and Other Compliance Requirements

In order to provide for distress signalling capabilities for recreational vessels we are imposing a single regulatory burden that may affect small businesses.

(1) Each MF, HF, and VHF marine radio for which an application for type acceptance is received on or after June 17, 1999, must comply with either the international requirements set forth in ITU-R Recommendation 493 (including only equipment classes A, B, D, and E) or the minimum requirements set forth in RTCM Paper 56-95/SC101-STD. This requirement, however, will not apply to battery operated, portable hand-held radio equipment or to Automated Maritime Telecommunications System (AMTS) equipment operating in the 216-220 MHz band. All classes of small businesses could potentially be affected by this requirement. In order to have a unit type accepted, a small entity would have to test the radio equipment and provide clerical support to file the requisite FCC application forms. Both of these functions could be handled by a third party.

E. Steps taken to minimize burdens of Small Entities

The Commission in this proceeding has considered comments on ways to implement broad changes to the maritime service rules. In doing so, the Commission has adopted alternatives which minimize burdens placed on small entities. First, it has decided to permit land units to operate under the authority of an associated public coast station's license without having to be individually licensed by the Commission. This approach eliminates the need for fixed and mobile units on land to file forms and submit fees to the Commission. *See* paragraph 17 *supra*. Second, it has decided to permit marine radio manufacturers to continue producing and selling conventional marine radios indefinately, even though it has set a deadline for the type acceptance for such equipment. This approach manufacturers to sell existing stock and continue to sell units to vessel operators in areas of the country where DSC capability is not needed or desired. *See* paragraph 27 *supra*. Third, it has decided not to license each ALE transmitter individually. This approach provides for system licensing of ALE transmitters nationwide and greatly reduces filing burdens for licensees providing ALE service. *See* paragraph 37 *supra*. Fourth, it has decided not to mandate DSC as the single protocol to be used by public coast stations for interconnection with the PSN. This approach permits coast station licensees to choose an interconnection protocol that meets market demands, rather than presupposing a protocol that may be too expensive or undesirable to implement in certain areas of the country. *See* paragraph 15 *supra*. Fifth, it has decided to simplify ship and aircraft radio licensing and provide a 90-day grace period for renewing ship and aircraft station licenses. This approach eliminates the need for licensees to re-notify the Commission and pay a modification fee each time a new type of radio